



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,824	12/08/2003	Norbert Nix	101749-00007	9277

7590 11/03/2005  
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC  
SUITE 400  
1050 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036-5339

EXAMINER	
PATIDAR, JAY M	
ART UNIT	PAPER NUMBER
2862	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/728,824

Applicant(s)

NIX, NORBERT

Examiner

Jay M. Patidar

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7-9 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

1. This communication is in response to applicant's amendment filed on August 11, 2005.
2. The abstract of the disclosure is objected to because the abstract does not set forth the nature and gist of the invention. Please note that the invention is directed to measuring internal resistance of the magnetic field sensing element.

Correction is required. See MPEP § 608.01(b).

3. Claims 9 and 16 are objected to because of the following informalities:  
In claims 9,16, the scope of the claim is not clear since it is vague as to what type of calculation is performed to determine the correction factor.

Appropriate correction is required.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-9,12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster et al. (3,359,495) in view of Miekley (5,818,225).

As to claims 7-8,14-15, McMaster discloses a measuring device for coating thickness using a magnetic sensor element as measuring device. McMaster fails to disclose for temperature compensation in the signal in a measuring device. Miekley discloses that it is known in the art that the resistance of the magnetic field sensing element is dependent on the temperature and can be used to measure the temperature (see abstract). Miekley also discloses that it is known in that art that the temperature coefficient of the magnetic sensor element is one of the important properties of the sensing element in determining the temperature (Note e.g. col. 1, lines 14+). These properties, resistance and temperature coefficient, of the magnetic field sensing elements are known to use for temperature compensation. Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of McMaster to use these properties of the sensing element as taught by Miekley to measure the temperature and to compensate the output signal for temperature compensation.

As to claims 9,16, the correction of the measured output voltage in Miekley is performed by calculation.

As to claims 12-13,17-18, the magnetic sensing element in McMaster or Miekley is Hall sensor element. McMaster teaches that Hall sensor can be replaced by MR (col. 4, line 68).

5. Applicant's arguments with respect to claims 7-9,12-13 have been considered but are moot in view of the new ground(s) of rejection.

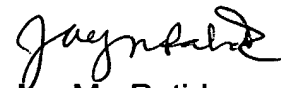
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 571-272-2265. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/728,824  
Art Unit: 2862

Page 5

A handwritten signature in black ink, appearing to read "Jay M. Patidar".

Jay M. Patidar  
Primary Examiner  
Art Unit 2862  
Email: [Jay.Patidar@USPTO.gov](mailto:Jay.Patidar@USPTO.gov)

October 31, 2005